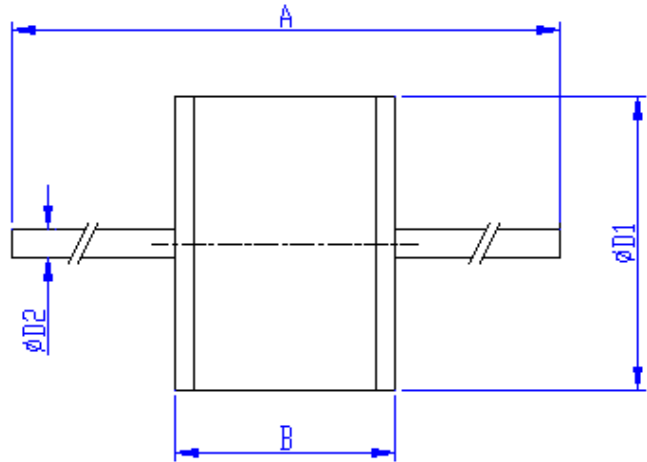


**Specification Status: Released**

**Marking:**

XX 23 R 05 HB

- Week of Manufacture**  
Per Manufacturer's Lot numbering system  
Eg. H = Second half of 2004; B = week 2
- Surge Rating**  
05: 5kA
- Product Family**
- Voltage Designator**  
23: 230V
- Manufacturer's Mark**



**TABLE I. DIMENSIONS**

	A		B		D1		D2
	MIN	MAX	MIN	MAX	MIN	MAX	NOM
mm	58.0	66.0	5.8	6.2	7.8	8.2	0.8
in*	(2.28)	(2.60)	(0.23)	(0.24)	(0.31)	(0.32)	(0.032)

\*Rounded off approximation

**TABLE II. ELECTRICAL CHARACTERISTICS**

DC Sparkover Voltage*	Impulse Sparkover Voltage		Insulation Resistance	Capacitance	AC Discharge Current, 50 Hz	Impulse Discharge Current 10/1000 $\mu$ s	Impulse Discharge Current, 8/20 $\mu$ s
@ 100V/s	@100V/ $\mu$ s	@1000V/ $\mu$ s	@100V <sub>DC</sub>	@1MHz	Multiple Hits (1s duration: 10 hits)	300 hits (150hits for each polarity)	10 hits (5hits for each polarity)
230V $\pm$ 15%	$\leq$ 600V	$\leq$ 700V	$\geq$ 10,000M $\Omega$	<1pF	5Arms	100A	5kA

\*In ionized mode  
Testing methods and specifications referring to ITU-T K.12

**General Characteristics:**

No Radioactive Materials  
Storage temperature: -40°C ... +90°C  
Operating temperature: -40°C ... +90°C  
Electrode: Ni Plating  
Lead Material: Tin Plated

Agency Recognitions: UL Recognized  
Precedence: This specification takes precedence over documents referenced herein  
Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid  
CAUTION: Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame



Expertise Applied | Answers Delivered

# Gas Discharge Tube

Over-Voltage Protection Device

**PRODUCT: GTCA28-231L-R05**

DOCUMENT: SCD28817  
REV LETTER: A  
REV DATE: JULY 17, 2014  
PAGE NO.: 2 OF 2

## Materials Information

**ROHS Compliant**

Directive 2002/95/EC  
Compliant

**ELV Compliant**

Directive 2000/53/EC  
Compliant

**Pb-Free**



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.